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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,111	03/01/2002	Yoed I. Nehoran	01-747 1496.00189	4179
24319	7590	07/12/2005	EXAMINER	
LSI LOGIC CORPORATION 1621 BARBER LANE MS: D-106 MILPITAS, CA 95035			TRAN, KHANH C	
			ART UNIT	PAPER NUMBER
			2631	

DATE MAILED: 07/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/087,111	NEHORAN ET AL.	
	Examiner	Art Unit	
	Khanh Tran	2631	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 01 March 2002.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935-C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1,11 and 19 is/are rejected.
- 7) Claim(s) 2-10 and 12-18 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 03/01/2002 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>03/01/2002</u> | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

Drawings

1. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 11 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bergstrand US Patent Application Publication No. US 2002/0087993 A1 in view of Branstad et al. U.S. Patent 5,533,021.

Regarding claim 1, in paragraph [0029], figure 2 illustrates a digital multimedia device 2 connected to a Common Interface Module 4 such as a Conditional Access

module by means of Common Interface connector 6. Figure 3 illustrates an IEEE 1394 Common Interface module 40 according to Bergstrand teachings. In paragraphs [0041] [0042], in one particular application to a digital multimedia device (such as a digital multimedia device 2 in figure 2), to which the inventive IEEE 1394 Common Interface module 40 is connected, is a digital multimedia device including a tuner, demodulator, a descrambling unit, an MPEG-2 decoder and a Common Interface Connector.

In paragraph [0035], Bergstrand further teaches that turning to FIG. 3, the module 40 comprises a Common Interface connector 44 including a transport stream interface 44a-b and a command interface 44c. The Common Interface connector 44 of module 40 may be implemented as a standard PC card connector as specified by the PCMCIA as mentioned above, and is releasably connectable to a Common Interface connector of a digital multimedia device, including a transport stream interface and a command interface. For instance, the Common Interface connector 44 of module 40 may be plugged into the Common Interface connector 6 of receiver 2 in FIG. 2. Thus, transport stream interface 44a-b is connected to TS interface 8 and command interface 44c is connected to command interface 10.

In light of the foregoing disclosure, the system in figure 2 includes:

A demodulator 16 for demodulating a transport stream time multiplexed virtual channels, such as an MPEG-2 transport stream, corresponding to the claimed first plurality of data signals compliant with the standard interface; see paragraph [0031]. Bergstrand does not teach demodulator 16 configured to generate a first clock signal compliant with a standard interface. Nevertheless, in column 5, lines 20-40, Branstad et

al. discusses that the MPEG-2 Transport Stream multiplexes a number of programs comprising video, audio and private data, and utilizes an embedded program clock reference (PCR) which allows multiple streams to be synchronized and allows the transmitter and the receiver to run synchronously with each other. Because MPEG-2 transport stream is a standard, it would have been obvious for one of ordinary skill in the art at the time of the invention that demodulator 16 generates the PCR compliant with a standard interface.

Referring to figure 2 of Bergstrand invention, MPEG decoder 22 is configured to produce an audio/video output 24, corresponding to the claimed second plurality of data signals compliant with the standard interface.

Bergstrand does not disclose a plurality of buffers configured to multiplex said first data signals with said second data signals at plurality of data interfaces in response to said first clock signal as claimed in the application claim. In paragraph [0040], Bergstrand teaches the IEEE 1394 Common Interface Module 40 may be provided with additional circuitry arranged to buffer the transport stream between Common Interface connector 44 and the IEEE 1394 link layer circuit 42 in order to assure proper synchronization. In light of the forgoing disclosure, it would have been obvious for one of ordinary skill in the art at the time of the invention that Bergstrand IEEE 1394 Common Interface Module 40 can be modified to implement a plurality of bi-directional buffers configured to multiplex the MPEG-2 transport stream input and MPEG-2 transport stream output as shown in figure 3 in response to the PCR. Motivation is the output of the IEEE 1394 Common Interface Module 40 is the IEEE 1394 Serial Bus.

In paragraph [0038], the common interface module may be provided with a microprocessor and appropriate software (not illustrated) to assist the digital multimedia device to transmit transport streams of digital multimedia and/or commands on the IEEE 1394 Serial Bus and to receive transport streams of digital multimedia and/or commands from the IEEE 1394 Serial Bus.

Regarding claim 11, claim 11 is rejected on the same ground as for claim 1 because of similar scope. Claim 1 claims a device comprising components that can perform all the steps claimed in claim 11.

Regarding claim 19, claim 19 is rejected on the same ground as for claim 1 because of similar scope.

Allowable Subject Matter

3. Claims 2-10 and 12-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Komi et al. U.S. Patent 6,477,185 B1 discloses "De-multiplexing And Decoding Apparatus For Coded Audio And Video Data".

Burns et al. U.S. Patent 6,630,964 B2 discloses "Multi-Standard Channel Decoder For Real-Time Digital Broadcast Reception".

Barry et al. U.S. Patent 6,591,419 B2 discloses "Digital Multi-media Device And Method Relating Thereto".

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh Tran whose telephone number is 571-272-3007. The examiner can normally be reached on Monday - Friday from 08:00 AM - 05:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ghayour can be reached on 571-272-3021. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KCT

Khánh công Trần

07/08/2005

Examiner KHÁNH TRẦN